

PCSP Module KSPS ProgramaCube™ Timing Module



10
YEAR
WARRANTY

Obsolete Specification
Redesigned product is available
see new specifications at:
www.szac.com/standard/standard.htm

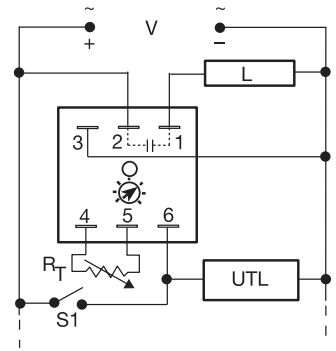
- In Stock, Factory
- Choose 1
- Microprocessor
- Solid state
- Knob, 1/4"
- 12 ... 230 V AC
- Delays from 0.1 s ... 1000 h

Description

The KSPS Series is a factory programmed module available in any 1 of 10 standard functions. The KSPS offers a single, fixed, or an adjustable time delay. Modules are manufactured without the function assigned. When an order is received, the function software is added, making the modules complete. This provides fast delivery on all part numbers. The 1 A steady, 10 A inrush rated solid state output provides 100 million operations typical. Its microcontroller timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KSPS Series is a cost effective approach for OEM applications that require small size, solid state reliability, and In Stock modules. Special time ranges and functions are available, contact Applications Assistance for more information.

Patent Pending

Approvals:



A knob is supplied for adjustable units or R_T terminals for external adjust.

V = Voltage L = Load UTL = Untimed Load
S1 = Initiate Switch

Ordering table

KSPS Series	Input	Adjustment	Time Delay*	Function**
1	12 V DC	1 - Fixed	0.1 ... 10 s	Specify Function (Refer to Function Chart for Code.)
2	24 V AC	2 - Knob Adjust	1 ... 100 s	
3	24 V DC	3 - External Adjust	10 ... 1000 s	
4	120 V AC		0.1 ... 10 m	
5	120 V DC		1 ... 100 m	
6	10 ... 1000 m		10 ... 1000 m	
7	0.1 ... 10 h		0.1 ... 10 h	
8	1 ... 100 h		1 ... 100 h	
9	10 ... 1000 h		10 ... 1000 h	

*If Fixed Delay is selected, insert delay [0.1 ... 1000] mins., or (H) hrs.

Example P/N: **KSPS923RE**
Fixed - **KSPS9155SI**

**Function Chart

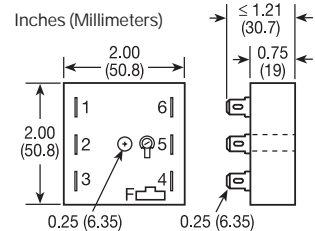
Code
M
B
RE
S
I
TS
US
UB
AM
PS

Technical Data

Time Delay	
Type	Microcontroller circuitry
Range	0.1 s ... 1000 h in 9 adjustable ranges or fixed
Repeat Accuracy	+/-1% or 16 ms at 60 Hz, 20 ms at 50 Hz, whichever is greater
Tolerance (Factory Calibration)	≤ +/-2%
Recycle Time	≤ 250 ms
Initiate Time	≅ 40 ms
Time Delay vs. Temperature & Voltage	≤ +/-2%
Input	
Voltage	12, 24, or 120 V DC; 24, 120, or 120/230 V AC
Tolerance	≤ +/-15%
Line Frequency	50 ... 60 Hz
Power Consumption (DC Voltages)	≤ 1 W
Output	
Type	Solid state output
Rating	1 A steady, 10 A inrush for 16 ms at 60°C 0.5 A @ 40°C
Voltage Drop	≅ 2.5 V at 1 A
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Insulation Resistance	≥ 100 MΩ
Polarity	DC units are reverse polarity protected
Mechanical	
Mounting	Surface mount with one #10 (M5 x 0.8) screw
Package	2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)
Termination	0.25 in. (6.35 mm) male quick connect terminals
Environmental	
Operating Temperature	-40°C ... +60°C
Storage Temperature	-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)

	Desired Time Delay*									R _T KΩ
	Seconds			Minutes			Hours			
	1	2	3	4	5	6	7	8	9	
0.1	1	10	100	0.1	1	10	0.1	1	10	0
1	10	100	1	10	100	1	10	100	10	10
2	20	200	2	20	200	2	20	200	20	20
3	30	300	3	30	300	3	30	300	30	30
4	40	400	4	40	400	4	40	400	40	40
5	50	500	5	50	500	5	50	500	50	50
6	60	600	6	60	600	6	60	600	60	60
7	70	700	7	70	700	7	70	700	70	70
8	80	800	8	80	800	8	80	800	80	80
9	90	900	9	90	900	9	90	900	90	90
10	100	1000	10	100	1000	10	100	1000	100	100

* When selecting an external R_T add at least 15% for tolerance of unit and the R_T.



Accessories

External adjust potentiometer
P/Ns: **P1004-95 (fig A)**
P1004-95X (fig B)

Female quick connect
P/N: **P1015-64 (AWG 14/16)**

Quick connect to screw adaptor
P/N: **P1015-18**

Versa-knob
P/N: **P0700-7**

DIN rail adaptor
P/N: **P1023-20**

DIN rail C103PM

See accessory pages at the end of this section.